

(FILE 'HOME' ENTERED AT 18:50:47 ON 19 SEP 2008)

INDEX 'ADISCTI, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, ANTE, AQUALINE,

AQUASCI, BIOENG, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA, CAPLUS,

CEABA-VTB, CIN, CONFSCI, CROPB, CROPU, DDFB, DDFU, DGENE, DISSABS, DRUGB,

DRUGMONOG2, DRUGU, EMBAL, EMBASE, ...' ENTERED AT 18:51:13 ON 19 SEP 2008

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SEA LACTOPEROXIDASE# AND CATION# AND (ELUTE OR ELUTION) AND (FI

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2 FILE CABA

6 FILE CAPLUS

4 FILE IFIPAT

1 FILE MEDLINE

1 FILE PROMT

550 FILE USPATFULL

115 FILE USPAT2

5 FILE WPIDS

5 FILE WPINDEX

L1 QUE LACTOPEROXIDASE# AND CATION# AND (ELUTE OR ELUTION) AND (FI

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FILE 'CAPLUS, MEDLINE, WPIDS' ENTERED AT 19:04:44 ON 19 SEP 2008

L2 12 S L1

L3 10 DUP REM L2 (2 DUPLICATES REMOVED)

FILE 'HOME' ENTERED AT 19:05:12 ON 19 SEP 2008

FILE 'CAPLUS' ENTERED AT 19:13:17 ON 19 SEP 2008

FILE 'CAPLUS, MEDLINE, WPIDS' ENTERED AT 19:13:39 ON 19 SEP 2008

FILE 'CAPLUS' ENTERED AT 19:13:41 ON 19 SEP 2008

L3 ANSWER 4 OF 10 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:19741 CAPLUS <<LOGINID::20080919>>

DOCUMENT NUMBER: 140:76329

ENTRY DATE: Entered STN: 11 Jan 2004  
 TITLE: Milk protein isolated by using \*\*\*cation\*\*\*  
           -exchange resin  
 INVENTOR(S): Soupe, Jerome  
 PATENT ASSIGNEE(S): Compagnie Laitiere Europeenne, Fr.  
 SOURCE: Fr. Demande, 23 pp.  
           CODEN: FRXXBL  
 DOCUMENT TYPE: Patent  
 LANGUAGE: French  
 INT. PATENT CLASSIF.:  
     MAIN: A23J003-08  
     SECONDARY: A61K038-00; A61K035-20; A61K038-40; A61P019-00;  
               A23C009-146  
 CLASSIFICATION: 17-8 (Food and Feed Chemistry)  
                   Section cross-reference(s): 18, 63  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2841747	A1	20040109	FR 2002-8234	20020702
FR 2841747	B1	20040820		
CA 2490622	A1	20040115	CA 2003-2490622	20030630
WO 2004004482	A1	20040115	WO 2003-FR2015	20030630
W: BR, CA, JP, KR, PL, US				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR				
BR 2003005244	A	20040921	BR 2003-5244	20030630
EP 1523243	A1	20050420	EP 2003-762713	20030630
EP 1523243	B1	20070110		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, SK				
ES 2280800	T3	20070916	ES 2003-762713	20030630
US 20060040025	A1	20060223	US 2005-519131	20050804
US 7247331	B2	20070724		
US 20080044544	A1	20080221	US 2007-757485	20070604
PRIORITY APPLN. INFO.: FR 2002-8234 A 20020702				
WO 2003-FR2015 W 20030630				
US 2005-519131 A1 20050804				

PATENT CLASSIFICATION CODES:

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
FR 2841747	ICM	A23J003-08
	ICS	A61K038-00; A61K035-20; A61K038-40; A61P019-00; A23C009-146
	IPCI	A23J0003-08 [ICM,7]; A23J0003-00 [ICM,7,C*];

A61K0038-00 [ICS,7]; A61K0035-20 [ICS,7]; A61K0038-40  
 [ICS,7]; A61P0019-00 [ICS,7]; A23C0009-146 [ICS,7];  
 A23C0009-00 [ICS,7,C\*]  
 IPCR A23C0009-00 [I,C\*]; A23C0009-146 [I,A]; A23J0001-00  
 [I,C\*]; A23J0001-20 [I,A]; A23L0001-305 [I,C\*];  
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 A61K038/17A2; A61K038/40  
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 A61K038/17A2; A61K038/40  
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 EP 1523243 IPCI A23J0001-00 [I,C]; A23C0009-00 [I,C]; A23L0001-305  
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 US 20060040025 IPCI C12G0003-08 [I,A]; C12G0003-00 [I,C\*]; A23C0001-00  
 [I,A]; A23J0001-20 [I,A]; A23J0001-00 [I,C\*];  
 A23L0002-38 [I,A]; A61K0047-00 [I,A]; C07K0001-18  
 [I,A]; C07K0001-00 [I,C\*]  
 IPCR C12G0003-00 [I,C]; C12G0003-08 [I,A]; A23C0009-00  
 [I,C\*]; A23C0009-146 [I,A]; A23J0001-00 [I,C\*];  
 A23J0001-20 [I,A]; A23L0001-305 [I,C\*]; A23L0001-305  
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 A61K0038-40 [I,C\*]; A61K0038-40 [I,A]; A61P0019-00  
 [I,C\*]; A61P0019-00 [I,A]  
 NCL 426/490.000; 426/580.000; 426/491.000; 426/271.000;  
 426/587.000; 426/588.000; 426/590.000; 514/775.000;  
 530/416.000  
 ECLA A23C009/146B; A23J001/20; A23J001/20C; A23L001/305D;  
 A61K038/17A2; A61K038/40  
 US 20080044544 IPCI A23C0009-00 [I,A]  
 NCL 426/580.000  
 ECLA A23C009/146B; A23J001/20; A23J001/20C; A23L001/305D;  
 A61K038/17A2; A61K038/40

#### ABSTRACT:

Milk protein isolates (>90% protein, with high lactoferrin and  
 \*\*\*lactoperoxidase\*\*\* activity) are isolated from milk or whey by adsorption  
 on a \*\*\*cation\*\*\* -exchange column and \*\*\*elution\*\*\* with a salt soln.,  
 followed by desalting and sterilization by \*\*\*filtration\*\*\* techniques.  
 Thus, skim milk is passed through a SPEC 70 column and proteins adsorbed on the  
 resin are eluted with 10% NaCl; \*\*\*ultrafiltration\*\*\* is used to conc. the  
 proteins and remove the salt; microfiltration is used to sterilize the isolate  
 (96.2% protein; 54% lactoferrin).

SUPPL. TERM: milk whey protein isolation \*\*\*cation\*\*\* exchange;  
lactoferrin \*\*\*lactoperoxidase\*\*\* isolation milk  
\*\*\*cation\*\*\* exchange

INDEX TERM: \*\*\*Ultrafiltration\*\*\*  
(desalting by; milk protein isolated by using  
\*\*\*cation\*\*\* -exchange resin)

INDEX TERM: Osteoblast  
(food supplement for growth stimulation of; milk protein  
isolated by using \*\*\*cation\*\*\* -exchange resin)

INDEX TERM: Arthritis  
Osteoporosis  
Periodontium, disease  
Rheumatic diseases  
(food supplement for prevention of; milk protein isolated  
by using \*\*\*cation\*\*\* -exchange resin)

INDEX TERM: Bone, disease  
(fracture, food supplement for prevention of; milk  
protein isolated by using \*\*\*cation\*\*\* -exchange  
resin)

INDEX TERM: \*\*\*Filtration\*\*\*  
(microfiltration, sterilization by; milk protein isolated  
by using \*\*\*cation\*\*\* -exchange resin)

INDEX TERM: \*\*\*Cation\*\*\* exchangers  
Dietary supplements  
Drug delivery systems  
Health food  
Milk  
Whey  
(milk protein isolated by using \*\*\*cation\*\*\* -exchange  
resin)

INDEX TERM: Lactoferrins  
ROLE: FFD (Food or feed use); PUR (Purification or  
recovery); THU (Therapeutic use); BIOL (Biological study);  
PREP (Preparation); USES (Uses)  
(milk protein isolated by using \*\*\*cation\*\*\* -exchange  
resin)

INDEX TERM: Proteins  
ROLE: FFD (Food or feed use); PUR (Purification or  
recovery); THU (Therapeutic use); BIOL (Biological study);  
PREP (Preparation); USES (Uses)  
(milk; milk protein isolated by using \*\*\*cation\*\*\*  
-exchange resin)

INDEX TERM: Growth disorders, animal  
(retarded, food supplement for prevention of; milk  
protein isolated by using \*\*\*cation\*\*\* -exchange

resin)

INDEX TERM: 7440-70-2, Calcium, biological studies

ROLE: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(food supplement contg.; milk protein isolated by using \*\*\*cation\*\*\* -exchange resin)

INDEX TERM: 9003-99-0P, \*\*\*Lactoperoxidase\*\*\*

ROLE: FFD (Food or feed use); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(milk protein isolated by using \*\*\*cation\*\*\* -exchange resin)

INDEX TERM: 362594-80-7, SPEC 70

ROLE: NUU (Other use, unclassified); USES (Uses)

(milk protein isolated by using \*\*\*cation\*\*\* -exchange resin)

INDEX TERM: 7447-40-7, Potassium chloride, uses 7647-14-5, Sodium chloride, uses 7786-30-3, Magnesium chloride, uses 10043-52-4, Calcium chloride, uses

ROLE: NUU (Other use, unclassified); USES (Uses)

(protein \*\*\*elution\*\*\* with; milk protein isolated by using \*\*\*cation\*\*\* -exchange resin)

REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS

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FILE 'STNGUIDE' ENTERED AT 19:14:35 ON 19 SEP 2008